

Problem Set 100

2. $c = 0$

4. $T_6 = 1.442$

6. 0

8. $y = \frac{3}{C - 2x^{3/2}}$

10. $\ln|\sin x| + C$

12. $\tan x - x + C$

14. $\tan x + C$

16. 32 units^3

18. $\pi\left(1 - \frac{\pi}{4}\right) \text{ units}^3$

20. 281.6

22. 3.723

24. $2x \cos(x^2 - 1) + \frac{\cos x}{e^x - 2} - \frac{e^x(\sin x + 1)}{(e^x - 2)^2} + \frac{1}{3} \ln|x^3 - 1| + C$